

We claim:

1. A method of treating a disease, condition, or disorder involving glutamate levels, the method comprising administering a transporter compound to an individual exhibiting symptoms of a disease, condition, or disorder involving transport of, or activation by, excitatory amino acids.

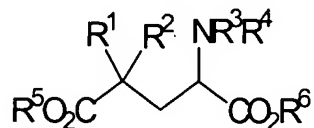
2. The method of claim 1 wherein the transporter compound is an agonist of a glutamate receptor.

3. The method of claim 1 wherein the transporter compound is an antagonist of a glutamate receptor.

4. The method of claim 1 wherein the transporter compound is a ligand of a glutamate receptor.

5. The method of claim 1 wherein the transporter compound selectively binds to one type of glutamate transporter.

6. The method of claim 1 wherein the transporter compound has the structure



wherein

$\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^5$  and  $\text{R}^6$  are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) halogen;

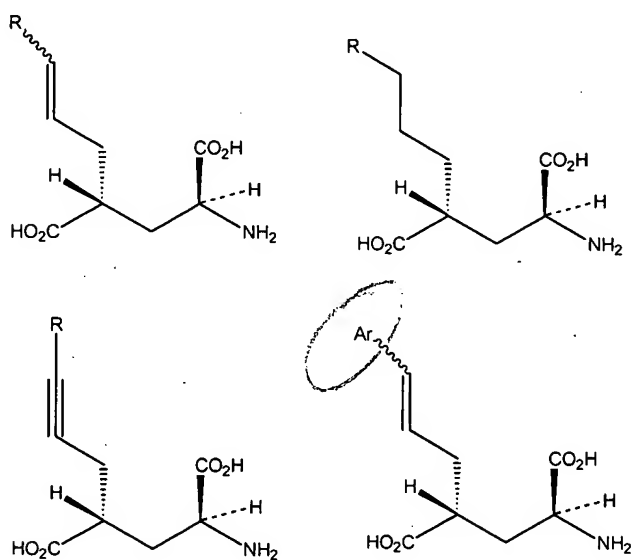
$\text{R}^3$  and  $\text{R}^4$  are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,

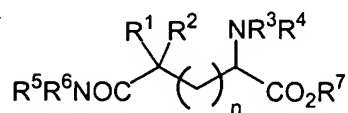
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO<sub>2</sub>-
- 9) CF<sub>3</sub>SO<sub>2</sub>-
- 10) PhSO<sub>2</sub>-
- 11) HCO-, or
- 12) C3-C6-alkynyl; and

R<sup>3</sup> and R<sup>4</sup> taken together can be -CH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>CH<sub>2</sub>- wherein n is 0, 1, 2, or 3.

7. The method of claim 1 wherein the transporter compound has the structure



wherein R = H, C1-C6-alkyl, C3-C4-alkenyl, C3-C5-cycloalkyl, C1-C6-alkyl-CO-, C1-C6-alkyl-OCO-, C1-C6-alkyl-NHCO-, HCO-, or C3-C6-alkynyl.

[illegible]

wherein

$n$  is an integer selected from the group consisting of 0, 1, 2, and 3;

$R^1, R^2, R^5$  and  $R^7$  are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) - halogen;

$R^3$  and  $R^4$  are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO<sub>2</sub>-
- 9) CF<sub>3</sub>SO<sub>2</sub>-
- 10) PhSO<sub>2</sub>-
- 11) HCO-, or
- 12) C3-C6-alkynyl;

$R^3$  and  $R^4$  taken together can be  $-\text{CH}_2(\text{CH}_2)_m\text{CH}_2-$  wherein  $m$  is 0, 1, 2, or 3;

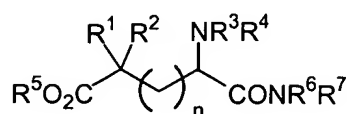
$R^6$  is independently

- 1) H,
- 2) C1-C6-alkyl,

- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO<sub>2</sub>-
- 9) CF<sub>3</sub>SO<sub>2</sub>-
- 10) PhSO<sub>2</sub>-
- 11) HCO-, or
- 12) C3-C6-alkynyl; and

R<sup>5</sup> and R<sup>6</sup> taken together can be -CH<sub>2</sub>(CH<sub>2</sub>)<sub>k</sub>CH<sub>2</sub>- wherein k is 0, 1, 2, or 3.

9. The method of claim 1 wherein the transporter compound has the structure



wherein

n is an integer selected from the group consisting of 0, 1, 2, and 3;

R<sup>1</sup>, R<sup>2</sup>, R<sup>5</sup> and R<sup>7</sup> are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) halogen;

R<sup>3</sup> and R<sup>4</sup> are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-

- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO<sub>2</sub>-
- 9) CF<sub>3</sub>SO<sub>2</sub>-
- 10) PhSO<sub>2</sub>-
- 11) HCO-, or
- 12) C3-C6-alkynyl;

R<sup>3</sup> and R<sup>4</sup> taken together can be -CH<sub>2</sub>(CH<sub>2</sub>)<sub>m</sub>CH<sub>2</sub>- wherein m is 0, 1, 2, or 3.

R<sup>6</sup> is independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO<sub>2</sub>-
- 9) CF<sub>3</sub>SO<sub>2</sub>-
- 10) PhSO<sub>2</sub>-
- 11) HCO-, or
- 12) C3-C6-alkynyl, and

R<sup>6</sup> and R<sup>7</sup> taken together can be -CH<sub>2</sub>(CH<sub>2</sub>)<sub>k</sub>CH<sub>2</sub>- wherein k is 0, 1, 2, or 3.